

I CLAIM:

1. A structure of an anti-shock device comprised of a base, a carrier, a slide block, and a plurality of springs; a slip concavity of a sunken round curved recess is respectively formed in the center of the said base top surface and
5 in the center of the said carrier bottom surface, and the said slide block is situated between the two said slip concavities; the said slide block consists of an upper slide block member, a lower slide block member, and a spheroid coupling bearing; a hemispherical seating recess is respectively formed in the bottom surface of the said upper slide block member and in
10 the top surface of the said lower slide block member, and the said spheroid coupling bearing is nested between the two said seating recesses; the contact surfaces between the said upper and lower slide block members and the said slip concavities consist of round curved surfaces that match the curvature of the said slip cavities, and the said upper and lower slide
15 block members are held together by the said springs; as so assembled, the said base of the anti-shock device is fastened onto the building foundation and the said carrier is fastened to the bottom section of the building columns to provide shock eliminating capability.
2. The structure of an anti-shock device as claimed in claim 1, wherein the
20 said upper and lower slide block members of the said slide block are

hemispherical and the said coupling bearing is columnar, with a hemispherical said seating recess is formed in its top and bottom for the placement of the said upper and lower slide block members, and the surfaces of the said upper and lower slide block members that contact the
5 said slip concavities are round curved convexity.

3. The structure of an anti-shock device as claimed in claim 1, wherein the said slide block is composed of the said upper and lower slide block members, the said upper slide block member is hemispherical, while the said lower slide block member is columnar and has a hemispherical said
10 seating recess that couples with the said upper slide block member, and the surfaces of the said upper and lower slide block members that contact the said slip concavities are round curved convexity.

4. The structure of an anti-shock device as claimed in claim 1, wherein the said coupling bearing is a rubber bearing, a laminated rubber bearing, a
15 lead-rubber bearing, a high-damping rubber bearing or springs, disposed between the said upper and lower slide block members and the surfaces of the said upper and lower slide block members that contact the said slip concavities are round curved convexity.

5. The structure of an anti-shock device as claimed in claim 1, wherein the
20 said base and the said carrier have respectively attached to their bottom

surface and top surface a lower and an upper support pad of a rubber or a spring composition and the said slide block is a single column having a round curved top and bottom surface that matches the curvature of the said slip concavities.

- 5 6. The structure of an anti-shock device as claimed in claim 1, wherein the said slide block is composed of the said upper and lower slide block members, the said coupling bearing is a hemispherically ended column connected to the bottom portion of the said upper slide block member, the said coupling bearing is nested in a hemispherical said seating recess
10 formed in the center of the said lower slide block member top surface, and the surfaces of the said upper and lower slide block members that contact the said slip concavities are round curved convexity.
7. The structure of an anti-shock device as claimed in claim 1, wherein the said springs can be a rubber bearing, a laminated rubber bearing, a
15 lead-rubber bearing, a high-damping rubber bearing, or a damping device.
8. The structure of an anti-shock device as claimed in claim 1, wherein the said slip concavity in the top surface of the said base and the said slip concavity in bottom surface of the said carrier can be round curved recesses with different curvatures and different sizes.
- 20 9. The structure of an anti-shock device as claimed in claim 1, wherein the

said carrier is a flat plate and the said upper slide block member is connected to the said carrier.

10. The structure of an anti-shock device as claimed in claim 1, wherein the said base, the said carrier, and the said slide block are of a physical arrangement that is interchangeable and reversible.
11. The structure of an anti-shock device as claimed in claim 1, wherein the said base and the said carrier can be square, rectangular, rhombic, circular, oval, or polygonal in shape.
12. The structure of an anti-shock device as claimed in claim 1, wherein the said upper and lower slide block members can be of a sectionally square, rectangular, rhombic, circular, star, or polygonal shape.
13. The structure of an anti-shock device as claimed in claim 1, wherein the said slip concavity surfaces are coated with a wear-resistant, lubricating material.
14. The structure of an anti-shock device as claimed in claim 1, wherein the said upper and lower slide block member surfaces are coated with a wear-resistant, lubricating material.
15. The structure of an anti-shock device as claimed in claim 1, wherein the said coupling bearing surfaces are coated with a wear-resistant, lubricating material.

16. The structure of an anti-shock device as claimed in claim 1, wherein the said seating recess surfaces are coated with a wear-resistant, lubricating material.
17. The structure of an anti-shock device as claimed in claim 5, wherein the
5 said upper and lower support pad can be a laminated rubber bearing, a viscoelastic body, a high-damping rubber bearing, or a lead-rubber bearing.
18. The structure of an anti-shock device as claimed in claims 1, 2, 3, 4, 5, 6, 7, 8, 9 wherein the indented area of the said seating recess in the bottom surface of the said upper slide block member and in the top surface of the
10 said lower slide block member is the surface of a partially hemispherical, a partially ovoid, a partially lentil-shaped or a partially egg-shaped solid and the said coupling bearing is an ovoid solid, a lentil-shaped spheroid or an egg-shaped spheroid.
19. The structure of an anti-shock device as claimed in claim 2, wherein the
15 said upper and lower slide block members of the said slide block are partially hemispherical, ovoid, lentil-shaped or egg-shaped and the surface of the seating recess is the surface of a partially hemispherical, a partially ovoid, a partially lentil-shaped or a partially egg-shaped solid.
20. The structure of an anti-shock device as claimed in claim 3, wherein the
20 said upper slide block member is partially hemispherical, ovoid,

lentil-shaped or egg-shaped and the surface of the said seating recess is the surface of a partially hemispherical, a partially ovoid, a partially lentil-shaped or a partially egg-shaped solid.

21. The structure of an anti-shock device as claimed in claim 6, wherein the
5 said coupling bearing is partially hemispherical, partially ovoid, partially lentil-shaped or partially egg-shaped and the surface of said seating recess is the surface of a partially hemispherical, a partially ovoid, a partially lentil-shaped or a partially egg-shaped solid.
22. The structure of an anti-shock device as claimed in claim 1, wherein the
10 curvature of the said slip concavity can be different according to the distance from the center of the said slip concavity.
23. The structure of an anti-shock device as claimed in claim 13, wherein the coated materials on the said slip concavity surfaces can be different according to the distance from the center of the said slip concavities.